REMARKS

Reconsideration of the present application is respectfully requested.

The Examiner has not acknowledged, either in the Office Action or on the form PTO-326 accompanying the Office Action, receipt of the certified copy of the Japanese priority filed concurrently with the present application. Express acknowledgement of receipt of this priority document in the Examiner's next communication is respectfully requested.

The Examiner has alleged that Applicant has canceled claims 2 and 9 – 13 in a previous response. However, Applicant elected claims 1 – 6 in a Response to Restriction/Election Requirement filed on August 19, 2002 and only by the present Amendment has canceled withdrawn/non-elected claims 7 and 8 without prejudice. The present application did not originally include claims 9 – 13; Applicant therefore assumes that the Examiner's acknowledgement is incorrect and is a typographical error. Clarification in the Examiner's next communication is respectfully requested.

Claims 1 – 6 have been rejected under 35 U.S.C. §103 as being obvious in view of the combination of Nagahara and Ishio. This rejection is respectfully traversed.

The semiconductor dynamic sensor as recited in claim 1 of the present invention includes a sensor chip 5 mounted on a substrate 3 by an adhesive film 4. Through the use of the adhesive film 4, misalignment of the sensor chip 5 on the substrate 3 that might otherwise result if a die bond resin or an adhesive agent is used and as shown in FIGs. 4A and 4B, is prevented. More specifically, it is difficult to precisely position a sensor chip on a substrate if a die bond resin or adhesive agent is used because the resin or adhesive tends to flow during curing and

therefore causes the sensor chip to move (i.e. lift up or rotate) relative to the circuit board during curing.

Nagahara discloses a semiconductor acceleration sensor in which a signal-processing chip 5 is mounted on an acceleration sensor chip 3, with the acceleration sensor chip 3 being connected to a die pad 11 by a *die bond resin* 13. Therefore, Nagahara does not teach or suggest positioning a sensor chip on a substrate using an adhesive film. Further, Nagahara actually teaches away from the present invention, as the signal processing chip 5 is mounted on an acceleration sensor chip 3, rather than vice versa, where the acceleration sensor chip 3 is analogous to the substrate 3 of the present invention.

Ishio on the other hand discloses a semiconductor acceleration sensor in which a sensor chip 21 is mounted on substrate 26 (or 27b if the seat is considered to be part of the sensor chip 21) by an adhesive agent 29 (or 31) such as a resin (see col. 10, lines 9 – 11) including resin beads 28 (or 30). The resin beads 28, 30 function to control the thickness of the adhesive agents 29, 31. Contrary to the Examiner's allegation, Ishio does not disclose the use of a resin film to mount the sensor chip 21 on the substrates 26, 27b. As a result, the position of the sensor chip 21 on the substrates 26, 27b may be difficult to control because of the resin adhesive and further because of the presence of the resin beads 28, 30.

As neither Nagahara nor Ishio, either singly or in combination, teaches or suggests a sensor chip positioned on a substrate by an adhesive film, Applicant respectfully requests that the Examiner's rejection of claim 1, as well as claims 2 – 6 depending therefrom, be withdrawn.

Further, regarding claim 2, neither Nagahara nor Ishio teaches or suggests a semiconductor dynamic sensor in which a semiconductor sensor chip is mounted on a substrate comprising a semiconductor chip having a sensor signal processing circuit. Specifically, as

discussed above, Nagahara discloses a semiconductor acceleration sensor in which a *signal processing chip* 5 is mounted on *an acceleration sensor chip* 3, which is a configuration that is quite different than that of the present invention. Ishio discloses a semiconductor acceleration sensor in which a sensor chip 21 is mounted on a substrate/substrates 26, 27b. However, Ishio neither teaches nor suggests that the substrate(s) include(s) a signal processing circuit. Ishio instead discloses amplifying and adjusting circuits, such as the circuits 32, 33 shown in FIG. 5, located remotely and separately from the substrates 26, 27b.

As neither Nagahara nor Ishio, either singly or in combination, teaches or suggests a sensor chip positioned on a substrate that is a semiconductor chip with a sensor signal processing circuit, Applicant respectfully asserts that claim 2 further distinguishes the present invention over the cited art, and therefore requests that the Examiner's rejection of claim 2 be withdrawn.

The Examiner should note that Applicant has added new claims 9 – 11, which recite the present invention in slightly different terms but which should be allowable over the art of record for the same reasons given above regarding claims 1 – 6.

As the application is in conditition for allowance for the above stated reasons, Applicant respectfully requests that the Examiner issue a Notice of Allowance as soon as possible.

Please charge any necessary fees to Deposit Account 50-1147.

Respectfully submitted,

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APPENDIX SHOWING CHANGES MADE TO TITLE

IN THE TITLE

Please replace the title with the following: SEMICONDUCTOR DYNAMIC SENSOR [AND METHOD OF MANUFACTURING THE SAME]